

ABSTRACT

An object of the present invention is to provide novel methods for forming glucosyl-transferred polyalcohols, glucosyl-transferred
5 glucuronic acid, and glucosyl-transferred derivatives of glucose whose C-6 hydroxyl group bound to a saccharide by using an enzymatic reaction. The present invention solves the above object by providing a method for transferring a glucosyl residue to polyalcohols, glucuronic acid and/or derivatives of glucose whose C-6 hydroxyl group bound to a
10 saccharide, comprising a step of:

allowing a trehalose phosphorylase to act on a saccharide containing glucose as a component sugar and

one or more polyalcohols selected from the group consisting of inositol, ribitol, erythritol, and glycerol;

15 glucuronic acid and/or a salt thereof; and/or

one or more derivatives of glucose whose C-6 hydroxyl group bound to a saccharide selected from the group consisting of isomaltose, gentiobiose, melibiose, isomaltotriose, and isopanose.